INNOVATION IN PUBLIC SERVICES:

THE CASE OF SPANISH LOCAL GOVERNMENT

Reyes Gonzalez, University of Alicante

Juan Llopis, University of Alicante

Jose Gasco, University of Alicante

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ABSTRACT

The present paper aims to determine the level of implementation of innovations in Spanish local government as well as to identify which types of innovations are most common. The paper also considers the link between innovative behavior and organizational size. However, since innovations cannot occur as isolated phenomena but rather as a part of corporate strategy, the study compares the innovative behavior of the local governments analyzed with their typologies or strategic profiles. In order to achieve the aforementioned aims, the paper uses a survey of the Human Resource Managers of Town Halls in the largest Spanish municipalities. The results of this survey show that the most frequent innovations in the local governments analyzed are collaborative; the largest town halls show more propensities to innovate and they focus on external relationships which are collaborative and on the basis on Information and Communication Technologies. The study reconfirms that town halls with a prospective profile are the most innovative.

Keywords: Innovation; public administration; strategy; Spain

1. INTRODUCTION

Since the 1980s, a new philosophy or set of ideas known as New Public Management (NPM) has guided management in Public Administration. Although NPM fosters values and goals of an economic nature, the concept is multifaceted and contains different elements. Firstly NPM entails the search for a type of professional management which makes active, visible and discretionary control over public organizations possible. This philosophy additionally encompasses the establishment of explicit results standards, a stronger emphasis on result control, increased competitiveness, unit disaggregation, deregulation and orientation towards customer service (Christensen and Laegreid, 2002).

NPM covers different themes (Hood, 1995), in particular improving managerial efficiency in the public sector, applying ideas from private enterprises and orienting them towards an improvement of the service delivered to citizens (Jacobsen, 2005; Mathiasen, 1999; Whelan, Davies Walsh and Bourke, 2010; Yamamoto, 2003). NPM has become the paradigm which must replace the bureaucratic administration of numerous public bodies (Gow and Dufour, 2000), which also requires new management structures and methods.

NPM have links with four administrative megatrends (Hansen, 2011): an attempt to slow down or reverse the growth of government or of the public sector; a change towards the privatization or quasi-privatization of basic public sector institutions; the incorporation of automation, particularly of Information and Communication Technologies (ICTs) into public service production and distribution; the development of a more international agenda that prevails over the individual traditions and peculiarities of each country in public management matters.

Therefore, NPM involves introducing innovation into public management through the use of downsizing and other methods to bring administrations closer to the perspective of their users or citizens. In this sense another of the claims of NPM has to do with the need for collaboration between the government and public administrations on one hand and citizens on the other. Collaboration means participation, negotiation, cooperation, freedom and an unlimited flow of information, innovation and agreements based on commitments and mutual understanding; in short, collaboration implies a more equitable distribution and redistribution of power and resources. Many of these values are totally opposed to the hierarchy, specialization and impersonality assigned to modern bureaucracies (Vigoda, 2002). Such an approach entails a change in organizational structures as well as the development of external relationships with private firms and public bodies and other institutions; all favored by the use of ICTs, which play a role not only in the design of services but also in the service delivery processes.

The present paper considers the level of innovation existing in Spanish local government and attempts to identify the most common innovation types using the innovation model of Walker (2006). As in previous studies (Akgün, Keskin, and Byrne, 2012; Hansen, 2011; Reginato, Paglietti, and Fadda, 2011), this paper will try to determine whether the level and/or type of innovation relate to certain internal characteristics of organizations such as their size.

However, organizations cannot introduce innovations in isolation; they have to form part of a conscious strategy. For this reason, another goal of this paper is to identify the strategic profile of Spanish local government and find out if these organizations really have strategic approaches in their managerial agenda. From the different organizational strategy models, this paper uses the Miles and Snow (1978) model because this model

specifically considers different strategic typologies that depend on the predisposition of organizations toward innovation. Consequently, the aim is to relate the strategic profiles of local governments to their predisposition to innovation. Despite the existing research on public governments, the authors of this study have not found any studies that establish a link between strategic profiles and innovation types and levels.

The structure of the rest of the paper is as follows: sections 2 and 3 carry out a review of the literature devoted to innovation and strategy in public management; section 4 presents the methodology of the fieldwork, which includes the use of a questionnaire completed by human resource managers in the town halls of the largest Spanish cities; the paper finishes with the presentation of the main results, discussion and conclusions in sections 5 and 6.

2. INNOVATION IN PUBLIC SERVICES: CONCEPTUAL BACKGROUND

In the late 1950s, few individuals and small teams were performing research about innovation –mainly economists and sociologists. Initially these two sets of researchers worked in isolation and apparent ignorance of one another. The 1960s and 1970s witnessed a growing contribution from economists and economic historians, from sociologists and from the fields of organizational studies, management, business history and political science. Finally, in the 1980s, studies about innovation become more integrated, principally around the notion of evolutionary economics. From around the mid – 1980s, the research about innovation centers on the adoption of an evolutionary (or neo-Schumpeterian) economics framework, an interactive model of the innovation process, and (a few years later) the concept of "systems of innovation" and the resourced based view of the firm (Alajoutsijärvi, Mainela, Ulkuniemi, and Montell, 2012; Martin, 2012).

2.1. Peculiarities of Innovation in Public Services

For many years, research into the area of innovation has focused on innovation in the industrial sector, whereas services and, more specifically, public services have received less attention (Kinder, 2002). However, following the reforms resulting from NPM-inspired ideas, along with the quick incorporation of ICTs into the public sector, studies into innovation in this sector started to proliferate. Table 1 shows this development, which, although not meant to give a thorough review of the existing literature, does reflect how the number of studies devoted to innovation management issues in the public sector has increased to a considerable extent in recent years.

Table 1 here.

The past decade has seen a variety of efforts to modernize public administration and transform the delivery of public services in many countries. The majority of efforts centre on improving the efficiency and effectiveness of internal government operations, communications with citizens and transactions with individuals and organizations, by making information and services available on the Internet (Feller, Finnegan, and Nilsson, 2011). E-government is the widely accepted term used to describe this phenomenon, and constitutes the most representative example of the relevance of innovation in the public sector nowadays.

Governments around the world promote innovation as a key tool to improve public services. Financial pressures and bureaucratic controls, along with the demands for better services make innovation difficult but also necessary as the only useful way to approach citizens and respond to their requests (Robertson and Ball, 2002).

The concept of innovation is complex and diverse, attempting to find ways to deliver better services to users and encompassing both external and internal changes; some

innovations may arise from interactions involving the different government administrations at various levels, etc. (Walker, 2006).

Innovation plays a key role in terms of renewing and shaping the resources available to organizations, as well as their competences and routines (Matthews and Shulman, 2005). Innovation allows organizations to react to internal weaknesses or external pressures and consequently becomes an important tool for decision-making agents all over the world. Of course, this concept also applies to the public sector, where innovation is a useful solution, the only possible one in the authors' opinion, during periods with strong economic pressures (Salge, 2011).

Borins (2001) categorizes the reasons motivating innovation in the public sector into five main groups: political initiatives (due to an election mandate, to the legislation or to political pressures); new leaders (new managers of public bodies); a crisis (i.e., a visible failure or problem); a variety of internal problems (changes in the environment, inability to meet demand or reach users, resource shortages, coordination needs); and new opportunities (resulting from technology or related to other causes).

Innovation is a broad concept that involves both the innovation process and the results of the process (Salge, 2011). Researchers usually classify the evolution of a creative idea into an organizational change as an innovation process. An ideal innovation process requires strong motivation on the part of individuals, groups and organizations to acquire new information and increase their sources of knowledge about a relevant problem. The ideal process also needs conceptual open-mindedness and a certain degree of pragmatism, that is, using practical methods which can turn a promising idea into productive change.

Nevertheless, valuable ideas and promising reforms in public administrations which end up being unsuccessful are not difficult to find. Unfortunately, the cost of an

ineffective innovation in the public sector is much higher than in the private sector, due to the impact on the media and the subsequent political consequences, which discourages innovation in the public sector. Also, the innovation process in the public domain is complex because of the necessary political decisions and considerations which very often create a barrier against proactivity and creativity, thus suffocating promising services (Vigoda-Gador, Shoham, Schwabsky, and Ruvio, 2005).

An additional problem for innovation in public management lies in the fact that the implementation and continuity of innovation depend on the continuity of political decision-makers; many examples of innovations exist which, at the beginning, seemingly have chances of success but the political party in power changes during their development and the new ruling party brings them to a halt under the pretense of supporting or encouraging other innovations (Schall, 1997).

Finally, public organizations have not had to compete in the free market area for a long time and, therefore, have no real pressure to update their services and participate in the reinvention game. The old bureaucracies saw competition, which is the true engine of innovation in the private sector as well as in the market, as something unimportant and insignificant (Vigoda-Gador et al. 2005). However, public sector organizations depend on a central source of government funds, so the constraints of a largely fixed pie create competition with other government agencies for funding (Matthews and Shulman, 2005).

Considering the above, the concept that the private sector is traditionally the source of innovative ideas and that, even today, the private sector is still better at introducing new concepts and ideas is not surprising. However, the public sector is showing itself to be more receptive to innovation in recent times. This situation undoubtedly benefits

from the willingness shown by the administrations themselves through the creation of a suitable environment for the birth of innovative ideas.

According to Gabris, Nelson and Wood (2009), the framework where innovations in the public sector can arise and be successful needs three factors: a credible leadership; organizations need managers who are leaders in innovation; managers who are believable –acting in a logical, coherent way– and able to implement by themselves, with their behavior, the innovations that they are promoting (Bartlett and Dibben, 2002; Ihrke, Proctor and Gabris, 2003); second, the need for a managerial team; a single person cannot lead innovation. Innovation requires a team of individuals who collaborate with each other, who have frequent communication, who have complementary skills and knowledge, and who trust and respect each other; third, the collaboration of the town council representatives, that is, the politicians, is necessary. Although politicians are not often the leaders or the promoters of innovations, their support is necessary. In any case, town councils should never orient their policies towards discouraging innovation.

The above points clearly show that the innovative process may have similarities in the public and private sectors, but also that peculiarities exist in the public sector which Kinder (2002) summarizes in Table 2.

Table 2 here.

2.2. Types of Innovation

Figure 1 here.

The study by Walker (2006), summarized in Figure 1, serves as the basis to understand the types of innovation which local governments can undertake. This study

classifies innovation into three types: Product Innovation, Process Innovation and Ancillary Innovation. Following Wu, Ma and Yang (2012) this paper will call the third type Collaborative because this name better explains the nature of this innovation type.

Product Innovation means creating new goods and/or services for consumers and includes three types: Total, offering new goods/services to new types of customers; Expansive, offering existing goods and services to the same users as before; and Evolutionary, offering new goods or services to the same type of users. In the OECD (2005) classification, Product Innovation means the use of new materials, new intermediate products, new functional parts, radically new technology and implementing fundamental new functions.

Process Innovation affects both management and the organization and changes the relationships between organization members, impacting the rules, roles, processes, structures, ways of communication and exchange between the organization members, as well as between the environment and the members (Huarng, Mas-Tur and Yu, 2012; Rezaeenour, Mazdeh and Hooshmandi, 2012; Walker, 2006). The literature identifies two types of Process Innovation: technological, associated with changes in physical equipment, techniques and organizational systems, and the purely organizational, which imply innovations in structure and strategy as well as in administrative processes. The European Commission (OECD, 2005) includes as Process Innovation the use of new professional software.

Public administrations are carrying out intensive work in the area of information processing, which is why a large part of the innovations implemented are technological, mainly based on the introduction of ICTs. A good information system makes the strategic planning process more agile, effective and efficient in local management (Luque-Martínez and Muñoz-Leiva, 2005) and provides the means required for internal

and external communication with, for example, citizens, other public bodies or various suppliers. ICT adoption is the ideal way to enable public administrations to both reduce costs and improve service quality (Kinder, 2002). Obviously, the introduction of ICTs cannot take place in isolation. Instead, ICT introduction implies a series of steps in the work processes, as well as in the knowledge, skills and tasks of the people in charge of using the newly introduced ICTs. For this reason, Orange, Elliman, Kor, and Tassanehji (2007) highlight three essential factors for all innovations: people, processes and technologies.

Finally, collaborative innovations, which Walker calls ancillary following Damanpour (1987), are those where achievement of success is beyond the organization's control, since these are innovations based on the relationships between the organization and the environment. Collaborative innovations are related to connections with other organizations, whether they are service providers, other public bodies or the users themselves. These innovations include those arising from cooperation with local firms that can entail service outsourcing. External agents usually play a highly relevant role in innovation, since innovation usually results from the combination of diverse types of knowledge, and that knowledge may be outside the organization itself. Open Innovation means collaborating with the outside by mixing external knowledge with that of the organization seeking to favor the emergence of innovations.

The similarities between Collaborative Innovation and Open Innovation are apparent (Chesbrough, 2003; Drechsler and Natter, 2012; Mueller, 1962; Von Hippel, 1988), as they are both concepts showing that the sources for innovation are no longer largely internal in an organization, but have spread to many loci in the outside environment. Along the same lines, Sanderson, Percy-Smith and Dowson (2001) suggest the need for

local governments to build relationships with other partners so that they can become learning and intelligent organizations. For this reason, Feller et al. (2011) claim that public authorities that want to transform the way in which they create and offer their services sustainably need to: a) maintain productive relationships with other public authorities and with other external bodies b) easily and safely exchange knowledge, competences and experiences with others so as to improve internal processes and the way of offering services to citizens and c) commit themselves to citizens and to other bodies for the purpose of achieving the joint creation of new services.

Obviously, citizens also play an important role in the transformation of public services and in their delivery, as they are the users of the services (Eggers, Hansen, and Davis, 2012; Feller et al.; 2011). Local authorities should consider consulting citizens so that they can take part in the design of new strategies which are bound to influence the actual services that those citizens will eventually receive in the future.

2.3. Innovation and Organizational Size

Ultimately, the successful implementation of innovations depends not only on internal factors but also on external ones (Boyne, Gould-Williams, Law, and Walker, 2005). Among the internal factors most commonly considered are the size of the organization (measured by number of workers, for instance), its resources (its budget or capital), and characteristics of the workers (e.g., their level of union membership) that would account for the organizational complexity level. In turn, the external factors include features relating to the town or municipality of the organization (number of inhabitants) or the local population's wealth level (Baviera-Puig, Buitrago-Vera, and Mas-Verdú, 2012; Damanpour and Schneider, 2008). Many of these (both internal and external) variables have to do with the size of the organization; the larger organizations are more likely to adopt innovations (Hansen, 2011), since they stand a better chance of

having new ideas and a wider range of knowledge and skills among employees, making innovation easier. Wealthier, more developed environments are also more prone to generating innovations.

The study of Reginato et al. (2011) reveals that larger municipalities more often adopt innovations. The explanation according to these authors lies in the higher visibility and complexity of larger municipalities. In other words, larger-sized organizations suffer greater pressures from their stakeholders (social as well as political pressures) and, in this respect they are also subject to more pressure when introducing innovations. Regarding complexity, the greater volume of work and information in larger organizations makes the introduction of innovations more necessary than in smaller organizations, particularly in the case of innovations associated with ICTs which is why larger organizations are more prone to adopt innovations, especially in the area of new technologies. These authors also highlight the fact that larger organizations own more human and financial resources to test and implement innovations and also to finance them.

Reginato et al. (2011) use the number of inhabitants to measure municipality size. In turn, Damanpour and Schneider (2008) also estimate size according to the resources available to the local government. This paper will also use human resources (number of workers) and financial resources (budget), as well as the number of inhabitants residing in the municipality.

3. STRATEGY IN PUBLIC MANAGEMENT

Strategic planning was still rather unusual in public administrations during the 1980s. Thus, Eadie (1983) highlights that strategic planning in the public sector was still in its infancy, and Denhardt (1985) points out that, although strategic planning was already essential for private firms and for some public bodies, this type of planning was

not at all frequent in the context of local administrations. However, strategic approaches in the public sector, and more precisely in local administrations, evolved from being an option to becoming a necessity by the mid-1990s, as Bolton and Leach (2002) point out.

This development happened because both the financial restrictions and the requirements to improve efficiency required tools which could help these institutions to orient themselves within an environment that was, to say the least, uncertain. Consequently, strategic planning and management techniques have fully entered the public sector in the last twenty years (Bauer, Guzmán, and Santos, 2012; Chang and Chen, 2012; Poister and Streib, 2005). Throughout this period, both academics and private sector executives have shown great interest in trying to determine how the use of strategic management tools could improve business performance. The same situation occurs in the case of public management, with local administrations being the area that receives the most attention in the literature.

Chief among the different strategic management models is that of Miles and Snow (1978) –a preferred model when studying the public sector. Thus, papers by Andrews, Boyne, Law and Walker (2009), Enticott and Walker (2008), Greenwood (1987), Meier, O'Toole, Boyne, and Walker (2007) and Poister and Streib (2005) use this model to provide the basis for the analysis of local administrations, public schools or other types of public bodies.

The model that appears in Miles and Snow (1987) defines a typology of organizational strategies that contains four ideal types: prospectors, defenders, analyzers and reactors. Prospectors are vanguard organizations that almost permanently seek opportunities in the market and experiment on potential responses to emergent trends. They are usually pioneers in new products and/or new customers.

Defenders are traditional organizations with a conservative vision of new product development. They typically compete in price and quality rather than with new products or markets, and they especially focus their attention on improving efficiency in their existing operations.

Analyzers represent an intermediate category between prospectors and defenders.

Reactors are organizations without a clearly defined strategy in which, despite perceiving high uncertainty levels, executives do not have a consistent strategy to react to that uncertainty. Reactors hardly ever make adjustments at all until pressures in the environment force them to do so.

Conant, Mokwa, and Varadatajan (1990), criticize the models that classify strategies into watertight typologies, as each organization does not follow only one type of strategy; on the contrary, many have hybrid strategies. Public organizations are a case in point because they must meet a wide range of objectives that compete with one another and that a variety of parties involved -citizens, politicians, mass media, users, regulators, etc.- can observe (Andrews et al., 2009).

Consequently a better assumption is that strategy categories are not watertight. Instead, a continuum exists between the different categories. This assumption would imply that the Analyzers category is redundant, as this category represents the combination of two categories (prospectors and defenders).

4. METHOD

Among the various public administrations that this paper could analyze for the study of innovation, the authors opt to focus on the study of local governments. The decision has to do with the fact that local governments are laboratories for experimenting with governmental reforms (Ihrke et al. 2003). Some scholars argue that local governments are more apt to innovate than state and federal governments because of their capacity to

make decisions quickly and decisively. Therefore, and based on the assumption that the largest town halls apply more strategic management techniques (Agranoff and McGuire, 2003; Berman, 1996; Boje and Whetten, 1981; Martins-Gonçalves and Sampaio, 2012; Poister and Streib, 2005;), the authors decide to send a questionnaire to the town halls of the largest Spanish cities, taking number of inhabitants as the index for municipality size. This information comes from a database called *La Web Municipal* (http://www.lawebmunicipal.com).

Although looking for multiple information sources in each town hall would probably prove interesting in order to provide a more varied perspective in the results, the authors preferred to administer the questionnaire only to Human Resources (HR) managers because working with a single informant may lead to obtaining better response rates. Furthermore, these managers not only have an overall vision of the organizations where they work but also a good knowledge of the organizational strategy (Cepeda-Carrión, Cegarra-Navarro, and Leal-Millan, 2012; Gannon, Doherty, and Roper, 2012; Koonmee, Singhapakdi, Virakul, and Lee, 2010; Kulik and Perry, 2008), explaining the belief that they could be good candidates to answer the questionnaire.

The preparation of the questionnaire takes the literature on strategy in town halls as a reference and uses three experts in local administration management to review the questionnaire. After uploading the questionnaire to a web page, the authors send a postal letter to the different town halls (c/o the HR manager) asking them to complete the questionnaire. Next the authors follow up via telephone call, which allow access to the e-mail address and/or telephone number of the HR manager or the Town Hall, leading to a second contact via e-mail. A final telephone call helps increase the response rate.

The study examines 388 answers from 1,000 town halls, which represents a 38.8% response rate (sampling error: 3.8%). Table 3 shows the study technical specifications. Note that the number of answers is superior or similar to that which appears in other research studies on local administrations (Enticott and Walker, 2008; Proeller, 2007; Rodenbach and Brettel, 2012; Sebaa, Wallace and Cornelius, 2009). The town halls which answer the questionnaire are representative of the total population in terms of size (measured by number of inhabitants) and territorial distribution, since all Spanish Autonomous Regions are in the sample. The study uses Student's t-test (t value = 0.838; significance = 0.402) to determine the possible mean difference in the sample by size (number of inhabitants). The study finds the degree of independence between Autonomous Region and response level by means of the Chi-square test (Chi-square value = 13.842; significance = 0.610).

Table 3 here.

Table 4 presents the measurements corresponding to the most important variables used in the study along with their reliability level.

Table 4 here.

5. RESULTS

5.1. Characteristics of Town Halls and Interviewees

Table 5 here.

Table 5 confirms that the town halls that answer the questionnaire have a large size - the average number of inhabitants exceeds 40,000 with an average annual budget of more than 93 million euros and staff numbers of nearly 400 people on average.

As for interviewees (Figure 2), as the authors sent the questionnaire to the Human Resource manager at these local institutions, a high response rate comes from these jobs or positions (42%), although the sample also includes interviewees who identify themselves only as technicians (24%) or HR administrative workers (11%). Understandably, this situation happens in smaller municipalities where individuals who, despite their position and responsibilities are not within the head category, perform tasks related to human resources. In 8% of the cases, politicians (mayor, deputy mayor or town hall secretary) completed the questionnaire. Also the 15% of the answers comes from the *other* category, in which the authors include the responses of a range of managers such as the quality manager, the general inspector, the modernization manager, the general secretary, the legal services manager, the general manager of the town hall and so on.

The interviewees are mostly men, although without an excessive imbalance (56% men as opposed to 44% women) and their age range is mostly situated between 40 and 49 years of age. The majority of interviewees are in group A (78%), this group comprises employees whose job requires having completed university studies. A much smaller number belongs to group C, administrative staff, for whom university studies are not a requirement. Although 40% of the interviewees are not very seniors, as they have occupied the position for only 5 years, the average seniority in the job is 10 years. All these characteristics about the profile of interviewees suggest that the interviewees fulfill all the training, seniority, hierarchy and position requirements needed to make them suitable to answer the questionnaire.

Figure 2 here.

5.2. Innovation

With regard to innovation strategies, the town halls in the sample are only moderately innovative. On a 1 to 7 scale, the level of coincidence between most of the projects implemented in recent years and the innovations suggested in the survey is medium. The study finds no significant differences between the most and least often implemented projects, as the scores for these items is around 4 (the average score in the measuring scale).

Table 6 here.

Town halls try to: offer new services to existing users, use new ICTs, improve external communication, offer existing services to new users, and develop schemes for cooperation with users. Town halls undertake the innovations related to centralization, the establishment of new managerial processes, inter-department co-operation and internal communication improvement less often. In short, despite the lack of great differences between the types of innovations implemented in most recent projects, the most common ones stem from the relationships that town halls have with their external environment, for example their users. This relationship is why the new ICTs have so much relevance.

On the other hand, the innovations that town halls implement least often refer to internal restructuring processes in the actual town halls or to innovation of processes not related to ICTs. The possibilities the Internet offer undoubtedly encourage town halls to start improving their external relationships with their end users.

A new variable, Innovation Degree, arises to identify whether a town hall innovates above or below the mean. The calculation of this variable is the result of adding up the scores (from 1 to 7) for the extent to which the town halls applies each innovation in the municipality, which in turn gives rise to a new variable known as Innovation Sum. The mean of that sum is 54.12. Therefore, Innovation Degree arises from giving a value of 1 (above mean innovation) to those town halls with a total Innovation Sum exceeding 54.12, while the study gives a value of 0 (below mean innovation) to those with a sum of less than 54.12. The mean allows us to have a central cut-off measure with 48.3% of town halls innovating below the mean and 51.7% which innovate above the mean.

Table 7 here.

The difference of means test for size-related variables (Table 7) with regard to the degree of innovation shows that larger municipalities (those with a higher number of inhabitants, a higher budget and a greater staff volume) present a greater degree of innovation.

The study has to reinforce Student's T-test for difference in means with Mann-Whitney's non-parametric test because, as Levene's test shows, no homoscedasticity in variables exists. Therefore, using the non-parametric test, the number of inhabitants variable would not have a significant difference in means with respect to innovation degree; in other words, the most innovative and least innovative town halls would not be significantly different regarding their number of inhabitants, but they would be significantly different in terms of budget and staff numbers.

Table 8 here.

Table 8 shows the differences of significant means between the items distinguishing innovative strategies and size variables in town halls. The table proves that the larger municipalities are the most prone to seek innovations based on new services for new users (total product innovation), new ICTs, improvement of external communications and decentralization. These issues are also the most strongly linked with the area of town hall external relationships, except for the decentralization issue, which represents an internal process innovation related to town hall infrastructure that is more necessary in large municipalities than in small ones, due to large municipalities' complexity.

However, town halls that are smaller because the municipality has fewer inhabitants and/or lower staff numbers mostly seek internal improvements and innovations that are related to the restructuring of the town hall itself, that is, process innovations.

5.3. Strategy

Table 9 here.

Regarding the strategic profiles of town halls (Table 9), one of their most relevant features is their interest in achieving qualitative aims and ensuring that their services reach the highest possible number of users, without losing sight of diversity and respect for the needs of social minorities. Furthermore, town halls seek novelty in the services that they offer while at the same time trying not to neglect the traditional areas. As for their attitude towards outsourcing, town halls mostly seek the use of their internal resources rather than the involvement of the private sector in the delivery of their services. Town halls often admit that they do not have good short-term or long-term planning and equally recognize that they are not very innovative or advanced either.

A principal components factor analysis with information about the items related to the strategic stance of town halls comes next. This factor analysis seeks to reduce the

information offered by the original variables into a set of factors or constructs that underlie that information, and with a lower number of variables than in the original group. Each factor is therefore a combination of several original variables. Highlighting the underlying factors in each group aims to obviate the redundant or less important information. Kaiser's criterion suggests extracting three factors due to the presence of three eigenvalues above 1, which account for 60.65% of the information provided by the original variables; a satisfactory ratio of over 50%. The authors carried out a varimax rotation, which allows a better interpretation of factors; the results drawn from this analysis appears in Table 10.

Table 10 here.

The following items contribute to the formation of the first factor: services are in the vanguard, offering the existing services to new users is a priority, offering new services to the existing citizens is a priority, we try to ensure that services reach the highest possible number of citizens, we try to ensure that services reach social minorities, a good strategic planning exists. These items relate to the prospective strategy, as the prospectors are those vanguard organizations that are looking for new products, services or new markets (Moore, 2005). Therefore, the authors call this factor prospective strategy.

The second factor refers to the defensive strategy, which essentially seeks to continue offering traditional services and to obtain a good output from internal resources. This item is consistent with the study of Moore (2005), who determines in his research that the defender is known for being protective of its current markets, adhering only to systems that have proven effective within the organization. The item referring to

cost reduction contributes with nearly the same degree of participation both in this factor and in the previous one, which is why the study does not interpret this item because the authors cannot correlate the item with any separate factor.

Finally, the third factor clearly relates to the *reactive strategy*, the strategy which is common in organizations that only act driven by external pressures or, following Moore (2005), organizations that are inconsistent in its adaptive pattern towards the environment.

5.4. Innovation and Strategy

Table 11 here.

Unsurprisingly, the difference in means test (Table 11) reveals that the town halls most typically located within the prospective profile are the most innovative. In other words, they innovate above the mean; similarly, those adopting a defensive strategy are more innovative too (although, in this case, the difference in means between the ones innovating more or less is not so visible). The results show nothing about town halls with a reactive strategy, since the relationship between this type of strategy and the degree of innovation is not significant.

Seeking to reinforce the previous results, Table 12 offers Pearson's bivariate correlations –with significance levels in brackets– between the different types of innovations undertaken in town halls and the strategic profiles defined above. This step confirms the results obtained in Table 11, since a positive, significant correlation exists between all sorts of innovations implemented in town halls and the prospective profile (with a high significance level as well). However, in the case of the defensive strategy, and despite being positively related to all innovative activities, no significance

corresponds to its relationship with two items (referred to as centralization and decentralization), which perhaps reveals that these local organizations find merely internal restructuring processes less interesting.

Finally, the stance that town halls located in the proactive profile adopt is clearly different, including both positive and mostly negative correlations with innovative measures. Furthermore, two of the only three significant correlations have a negative sign; that is, the town halls that have this profile only correlate positively with innovation in management processes, and negative correlations exist with the measures supporting the improvement of external communication and inter-departmental cooperation.

Table 12 here.

6. DISCUSSION AND CONCLUSIONS

The analysis of innovative activity in the largest Spanish town halls reveals a timid predisposition to innovation which confirms the conclusions in previous studies (Parrado, 2008). Within the so-called Napoleonic tradition, Spain is somewhat slow and has difficulty introducing innovations compared to Anglo-Saxon countries. Furthermore, the public sector has traditionally not encouraged innovation, since rewards for successful innovation are not present; instead penalties for unsuccessful innovations are more likely. Public leaders, mainly politicians, meet criticism when new models fail and the many regulations to prevent corruption and improve public control hamper innovation by constraining the freedom required to conceive and implement innovations (Borins, 2001). Therefore, these conclusions fall into an area of predictability.

The most frequent innovations in the local governments analyzed are those of the collaborative type, which encourage relationships with the external environment, especially with citizens, and which revolve around investment in ICTs, whereas innovations related with the internal management of local governments are not so easily applicable.

Regarding the impact of size on innovation propensity, the largest town halls, with higher numbers of inhabitants, higher budgets and higher staff numbers show more propensity to innovate, which confirms the hypotheses formulated in prior studies (Damanpour and Schneider, 2008; Hansen, 2011; Reginato et al., 2011).

Furthermore, one can perceive how the innovative trends in the larger and smaller town halls of the sample are different. Larger-sized municipalities especially seek innovation focused on external relationships, which are collaborative and based on the new ICTs. Their only type of internal innovation, focused on the management of their own internal processes, refers to the need for decentralization, which is not surprising because large organizations need to implement this reform. However, smaller town halls are more prone to limit their innovations to the merely internal context, seeking new organizational forms.

One of the most relevant characteristics of town hall strategic profiles is the desire to achieve qualitative aims and to ensure that services reach the highest possible number of users, without underestimating aspects such as diversity and respect for social minorities. Town halls additionally seek novelty in the services that they offer, while simultaneously trying not to neglect traditional areas. On the whole, town halls admit that they lack good short-term and long-term strategic planning and equally recognize that they do not have a vanguard or innovative approach.

Using factor analysis allows this study to identify three distinct strategic profiles in the town halls interviewed – as in the study of Andrews et al. (2009) – which coincide with the profiles that Miles and Snow (1978) call prospective, defensive and reactive strategies.

In relating the strategic profiles of town halls to their innovative trends, the authors reconfirm that town halls with a prospective profile are the most innovative, as expected. Town halls showing a defensive profile, despite being quite innovative, are not so interested in innovations based on merely internal restructuring processes, whereas reactive town halls do not show a well-defined profile regarding innovation; in fact, they tend to show unfavorable rather than favorable attitudes toward innovation.

As for the limitations faced in this paper, the survey sample unit is a single informant in each organization, although this limitation has also allows for a good response rate that is actually higher than the rates obtained in surveys with several interviewees. Despite the HR manager's qualification, having access to the opinions of managers in other town hall departments could widen the study's vision of this topic. Also, although the questionnaire was addressed to the HR Managers, other interviewees, some of them coming from lower levels, such as technicians or HR administrative workers, answer the questionnaire. Enlarging the conclusions with case studies that might allow us to go deeper into the nature and typology of innovations and into the links between innovation and strategy in local governments would also be very interesting.

From a practical perspective, this study reveals that a lot of work remains in the context of innovation management in local governments which, despite their efforts, still lack a completely proactive stance as far as innovations are concerned.

The contribution of the paper is twofold. On the one side, the article analyzes the innovation degree in the context of the Spanish public administration. The Anglo-Saxon context is the basis for most of the papers about innovation in public administration (Damanpour and Schneider, 2008), so expanding the research to other areas like Spain, which are slower at applying the reforms, proposed by NPM, is necessary. On the other side, the paper puts in relation the notion of innovation with that of strategic profiles in public administration, following the Miles and Snow model. This research confirms that the Miles and Snow model is valid to define the strategic profile of public administrations as regards the innovation degree, due to the fact that those more innovative organizations are at the same time those more clearly belonging to the prospective profile.

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Table 1: Studies on innovation in public management

Study	Objective	Methodology
Barlett and Dibben (2002)	Studying the nature of public sector innovation and entrepreneurship	12 case studies at English local government
Ihrke, Proctor & Gabris (2003)	Studying the relationship between the credibility of administrative leaders, the level of conflict at city councils and the relationships between city councils and administrative staff with the perception of success of innovations at local government	179 surveys at Wisconsin municipalities (USA)
Boyne *et al*. (2005)	Examining the impact of internal and external constraints on the utilization of an innovative management reform scheme.	Three surveys at different moments in time, semi-structure interviews and documentary analyses over 79 services in Welsh Local Government
Walker (2006)	Testing innovation type and diffusion in local government	A survey among 120 English local authorities
Damanpour & Schneider (2008)	Analyzing the link between innovation characteristics and innovation adoption levels in US local governments	Two surveys addressed to City Managers or Chief administrative officers in the US (1,276 answers and 1,586 answers respectively)
Feller, Finnegan and Nilsson (2011)	Studying how open innovation strategies can transform public administration	Case Studies, interviews with different managers at six Swedish municipalities and document analysis
Hansen (2011)	Studying innovations related to New Public Management and their diffusion	Survey among 543 managers in different areas (culture, social services, technical services…) at Danish local governments
Hsieh (2011)	Studying the diffusion of Management Innovation in local economic development programs	Panel data, years 1994, 1999, 2004, municipal and county governments (USA)
Reginato et al. (2011)	Studying how social and structural characteristics influence innovation processes at local government	Survey among managers at Italian municipalities
Salge (2011)	Determining a model for innovation intensity in public management (hospitals).	Panel data, secondary information (databases) and primary information (interviews) over a five-year period (UK)

Table 2: Peculiarities of innovation in the public sector

Goals	The market sectors and physical market space which Public Administrations serve are more constrained by regulations, including limits on the ability to trade. Public Administrations are directly or indirectly accountable for public funds, introducing a different set of stakeholder and transparency issues. These may include an obligation to jointly plan or consult with other (vertical or horizontal) Public Administrations.
Products	Public Administration services are often a statutory obligation, coupled with a duty of care and regulated standards of quality, cost and coverage.
Resources	Public Administrations are directly or indirectly tax-funded and have a limited ability to borrow, even for sound business propositions.
Customers	Customers may be vulnerable and lack effective demand –Public Administrations only enjoy a limited choice of customers; however, they may enjoy great customer loyalty.
Risk	The duty of care of Public Administrations can limit technological risk-taking. Single-annularity in finances can limit financial risk-taking.
Suppliers	Procurement processes are often subject to openness, compulsory competitive tendering and a public audit predilection towards the least cost. Possible pressure on Public Administrations to source locally.
Organization	As private bureaucracies, Public Administrations face inflexibilities. The strategies open to Public Administrations are often more constrained (such as outsourcing, exit, partnering) and inevitably involve transgressing governances.
Outcomes	Public Administrations are primarily redistributive whilst firms are income-generating. Thus increasing sales (via new products, new markets and market share) is essentially more important to firms than to Public Administrations.
Governance	Public Administrations are publicly accountable and audited, which reinforces risk-aversion. Public Administrations do not face the 'innovate or die' culture of competitive markets. Lack of profit motive and/or demand-led services can create an absence of financial discipline in Public Administrations.

Source: Kinder (2002)

Table 3: Study technical specifications

Scope	Spain
Population	1,000 largest Town Halls (by population)
Sample size	388 (38.8%)
Sampling Error	3.8%
Survey Date	July 2009-March 2010

Table 4: Measurements of variables and reliability

Construct	*Source*	*Measure*	*Reliability (Cronbach's α)*
Town Hall innovation	Walker (2006) and own materials	13 items, 1-7 likert scale	0.915
Town Hall strategic profile	Andrews et al. (2006); Boyne and Walker (2004) and own materials	11 items, 1-7 likert scale	0.762

Table 5: Town hall size

	Mean	*Median*	*Mode*	*Maximum*	*Minimum*
No. of inhabitants	41,579	16,102	6,434	566,447	6,434
Budget (€)	93,082,000	15,500,000	7,000,000	900,000,000	5,200,000
Staff volume (No. of workers)	381	190	200	5300	13

Table 6: Innovation

	Mean	Median	Mode
New services existing users	4.8	5	5
New ICTs	4.8	5	5
External Communication Improvement	4.5	5	5
Existing services for new users	4.3	4	4
Cooperation with users	4.1	4	4
Restructuring	4.1	4	6
Cooperation with local firms	4.1	4	5
New Services for new users	4.0	4	4
Decentralization	4.0	4	4
Internal Communication Improvement	4.0	4	3
Inter-department cooperation	3.9	4	4
New Managerial Processes	3.5	4	4
Centralization	3.5	4	4

Table 7: Mean Equality Test, Innovation, Size

			Levene					
	Innovation Degree	Mean	F	Sign.	T (Student)	Sign.	U Mann-Whitney	Sign.
No. of inhabitants	Above the mean Below the mean	64,658 28,160	48.455	0.00	3.964	0.00	9,336	0.10
Budget (€)	Above the mean Below the mean	177,970,000 37,174,000	36.032	0.00	4.210	0.00	728	0.00
Staff volume (No. of workers)	Above the mean Below the mean	501 250	30.164	0.00	3.842	0.00	7,532	0.00

Table 8: Mean Equality Test, Innovation, Size variables

			Levene			
	Budget (€)	Mean	F	Sign.	T (Student) or U Mann-Whitney	Sign.
New services for new users	Above the mean Below the mean	4.3 3.6	0.761	0.38	-3.673	0.00
New ICTs	Above the mean Below the mean	5.1 4.3	1.559	0.21	-3.139	0.00
External Communication Improvement	Above the mean Below the mean	4.9 4.1	22.653	0.00	1394*	0.01
Decentralization	Above the mean Below the mean	4.4 3.4	1.252	0.26	-3.635	0.00
	No. of Inhabitants					
Restructuring	Above the mean Below the mean	3.8 4.5	0.042	0.83	3.211	0.00
	Staff Volume					
Restructuring	Above the mean Below the mean	3.8 4.4	0.049	0.82	2.611	0.09

*The asterisk distinguishes the U Mann-Whitney statistic from Student's t (without *)

Table 9: Town hall strategic profile

	Mean	*Median*	*Mode*
We try to ensure that services reach the highest possible number of citizens	5.7	6	7
We try to ensure that services reach social minorities	5.2	5	6
Offering new services to the existing citizens is a priority	4.7	5	5
The services that we offer are focused on traditional areas	4.6	5	5
We try to use internal resources for service delivery	4.6	5	5
External pressures are those exerting the strongest influence on the services offered	4.6	5	5
Offering the existing services to new users is a priority	4.5	5	4
Cost savings are essential when delivering a service	4.4	4	4
The services that we offer are in the vanguard of the most innovative town halls	3.8	4	4
We seek private sector involvement in service delivery	3.7	4	3
A good short-term and long-term strategic planning exists	3.3	3	5

Table 10: Total Variance explained and rotated component matrix in factor strategy

Total variance explained							Rotated Factor Matrix			
	Initial eigenvalues			Rotation sum of squared loadings			Variable	Factor		
Factor	Total	Percentage of variance	Cumulative %	Total	Percentage of variance	Cumulative %		1	2	3
1	4.110	37.367	37.367	3.638	33.070	33.070	Services are in the vanguard	0.846		
2	1.502	13.654	51.021	1.653	15.030	48.101	Traditional services		0.616	
3	1.059	9.625	60.646	1.380	12.545	60.646	External pressures			0.759
4	0.893	8.121	68.766				Exist. services for new users	0.707		
5	0.828	7.529	76.296				New services for exist. users	0.799		
6	0.642	5.837	82.133				Cost savings are essentials	0.340	0.337	
7	0.557	50.60	87.193				Private sector involvement			0.724
8	0.433	3.937	91.130				Use of internal services		0.748	
9	0.394	3.579	94.709				Serv. to highest No. of citiz.	0.624		
10	0.333	3.024	97.733				Serv. to social minorities	0.663		
11	0.249	2.267	100.000				A good strat. planning exists	0.736		

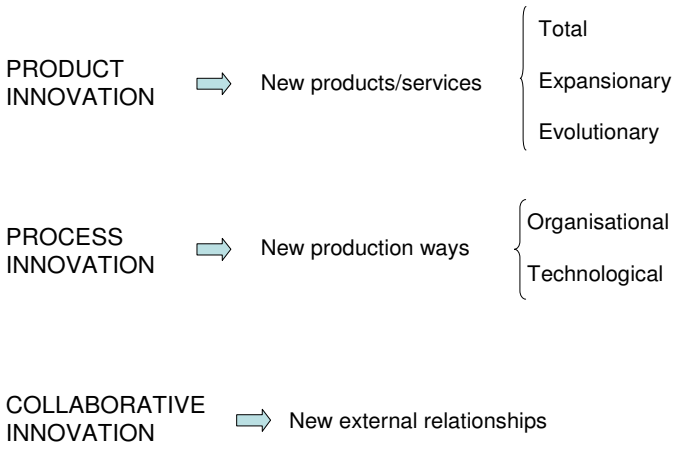
Table 11: Mean Equality Test, Degree of Innovation, Type of Strategy

			Levene					
	Innovation Level	Mean	F	Sign.	T (student) or U Mann-Whitney	Sign.	U Mann-Whitney	Sign.
Prospective	Above the mean Below the mean	0.71 -0.71	8.571	0.00	16.962	0.00	1,384	0.00
Defensive	Above the mean Below the mean	0.14 -0.29	0.819	0.36	3.722	0.00	6,924	0.00
Reactive	Above the mean Below the mean	-0.02 -0.03	0.871	0.35	0.009	0.99	8,848	0.32

Table 12: Correlations, Innovations, Type of Strategy

	Prospective	Defensive	Reactive
New services for new users	0.51**(0.00)	0.13*(0.01)	0.03(0.52)
New services for existing users	0.49**(0.00)	0.30**(0.00)	-0.01(0.83)
Existing services for new users	0.45**(0.00)	0.30**(0.00)	-0.01(0.79)
New ICTs	0.56**(0.00)	0.21**(0.00)	-0.09(0.09)
Internal Communication Improvement	0.62**(0.00)	0.17**(0.00)	-0.06(0.24)
External Communication Improvement	0.51**(0.00)	0.30**(0.00)	-0.15**(0.00)
New Managerial Processes	0.52**(0.00)	0.17**(0.00)	0.12*(0.03)
Centralization	0.26**(0.00)	0.04(0.46)	0.06(0.24)
Decentralization	0.43**(0.00)	0.09(0.11)	0.08(0.14)
Inter-department cooperation	0.51**(0.00)	0.14**(0.00)	-0.12*(0.02)
Restructuring	0.46**(0.00)	0.15**(0.00)	-0.06(0.23)
Cooperation with users	0.64**(0.00)	0.24**(0.00)	-0.00(0.96)
Cooperation with local firms	0.62**(0.00)	0.18**(0.00)	0.05(0.35)

** The correlation is significant at a 0.01 level. *The correlation is significant at a 0.05 level.



Source: Self-elaborated from Walker (2006)

Figure 1: Types of Innovation

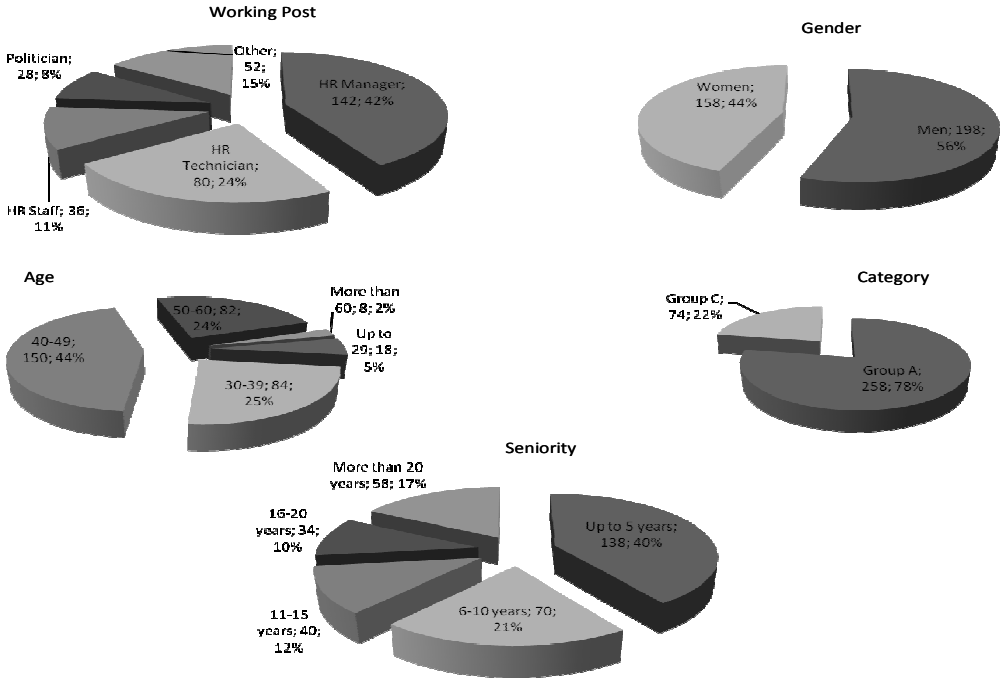


Figure 2: Interviewees' profile